

ISTEP+: Grade 4 Science **Blueprint**

There are six Indiana Standards for Grade 4 Science, and they are divided into six categories for reporting student achievement. Age-appropriate concepts are assessed within each category.

Reporting Category	Standards Assessed and Description	Percent Range *
1 – Nature of Science and Technology	Standard 1 Questions may include creating and reading charts and graphs to identify patterns in data; using scientific tools; understanding the importance of communication among the fields of science; and realizing how results compare from repeated investigations.	11-21%
2 – Scientific Thinking	Standard 2 Questions may include explaining the reasonableness of measurements related to length, weight, and time; describing observations; using numbers and words to communicate observations; and comparing, explaining, and justifying both information and numerical functions.	13-23%
3 – The Physical Setting	Standard 3 Questions may include identifying examples of change as a continual process occurring on Earth; explaining the day-and-night cycle; explaining why the moon looks different every day; realizing how shadows change; and describing the actions of electrically-charged materials.	24-34%
4 – The Living Environment	Standard 4 Questions may include understanding the cycle of organisms as they live, die, and decay; describing how organisms interact with one another; explaining the needs of people; understanding how fossils provide evidence of the past; recognizing that extinct organisms are related to present day organisms; understanding why vitamins and minerals are essential for good health; and identifying the body's defenses against germs.	11-21%
5 – The Mathematical World	Standard 5 Questions may include selecting appropriate measuring units; constructing tables and graphs to show connections between data; and identifying questions that can be answered by data distribution.	6-16%
6 – Common Themes	Standard 6 Questions may include taking measurements of things over time; describing how some features of things stay the same even when other features change; and explaining how models can be used.	4-14%

* This range represents the approximate emphasis for each reporting category on the assessment.